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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,353	12/08/2003	Ward Thomas Brown	A01474	1784

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EXAMINER
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SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
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1714

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,353	<b>Applicant(s)</b> BROWN ET AL.	
	<b>Examiner</b> Callie E. Shosho	<b>Art Unit</b> 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4,6 and 8-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

1. All outstanding rejections are overcome by applicants' after-final amendment filed 5/23/06, which has been entered.

In light of the new grounds of rejection set forth in paragraphs 4-10 below, the following action is non-final and thus, the finality of the previous office action has been withdrawn.

**Claim Rejections - 35 USC § 112**

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 6, which depends on claim 1, recites "wherein said polymer particles have a glass transition temperature of at least 35 °C" while claim 1 has been amended to recite that the polymer particles are multistage polymer particles comprising first polymer and second polymer. It is the examiner's position that this phrase fails to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of multistage polymer particles having glass transition temperature of at least 35 °C in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and

MPEP 2163. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed.

In light of the amendment to present claim 1, claim 6 now requires that the polymer particles of claim 1, i.e. multistage polymer particles, have a glass transition temperature (T<sub>g</sub>) of at least 35 °C. However, there is no support for such recitation in the specification as originally filed. While there is support in the specification to recite that polymer particles having first phosphorous acid groups have T<sub>g</sub> of at least 35 °C, there is no support in the specification as originally filed to recite that polymer particles that are multistage polymer particles comprising first polymer and second polymer as required in present claim 1 have T<sub>g</sub> of at least 35 °C. There appears to be no disclosure in the specification as originally filed regarding T<sub>g</sub> of multistage polymer particles.

#### **Double Patenting**

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225

USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-4, 6, and 8-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/642,791. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following explanation.

Copending 10/642,791 discloses polymer composition comprising multistage polymer particles comprising first polymer comprising polymerized unit of multiethylenically unsaturated monomer and at least one pendant absorbing group of phosphorous acid wherein the first polymer has a glass transition temperature (T<sub>g</sub>) of from -60 °C to 35 °C and a second polymer having a glass transition temperature of from -60 °C to 35 °C wherein the second polymer is

substantially free of the at least one pendant absorbing group. It is also disclosed that the average weight ratio of the first polymer to the second polymer is in the range of from 1:2 to 1:20.

The difference between copending 10/642,791 and the present claimed invention is the requirement in the claims (a) that the first polymer comprises polymerized units of phosphorous acid monomer, (b) that the polymer particles are prepared by aqueous emulsion polymerization of phosphorous acid monomer at pH less than 2 and/or the polymer composition comprises level of water-soluble polymer having second phosphorous acid groups defined by ratios of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups in the range of less than or equal to 1.5, (c) of colorant and white pigment as well as amounts of colorant, white pigment, and polymer particles, and (d) of ink jet ink (claim 10).

With respect to difference (a), it is noted that the present claims require multistage polymer particles wherein the first polymer comprises polymerized units of phosphorous acid monomer while copending 10/642,791 discloses multistage polymer particles wherein the first polymer comprises at least one pendant absorbing group including phosphorous acid groups.

Applicants attention is drawn to MPEP 804 where it is disclosed that “the specification can always be used as a dictionary to learn the meaning of a term in a patent claim.” *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. (underlining added by examiner for emphasis) *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970).

Consistent with the above underlined portion of the MPEP citation, attention is drawn to page 19, lines 9-10 of copending 10/642,791 which discloses that phosphorous acid absorbing groups are incorporated into the first polymer by polymerization of phosphorous acid monomer.

In light of the above, it is clear that the multistage polymer particles of copending 10/642,791 do in fact comprise polymerized units of phosphorous acid monomer and thus, one of ordinary skill in the art would have arrived at the claimed invention from the copending one.

With respect to difference (b), applicants attention is drawn to MPEP 804 where it is disclosed that "the specification can always be used as a dictionary to learn the meaning of a term in a patent claim." *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent (underlining added by examiner for emphasis) *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970).

Consistent with the above underlined portion of the MPEP citation, attention is drawn to page 23, 2<sup>nd</sup> full paragraph, page 24, 1<sup>st</sup> full paragraph, page 25, 1<sup>st</sup> full paragraph and page 26, 2<sup>nd</sup> paragraph of copending 10/642,791 which discloses that the polymer particles are in produced using aqueous emulsion polymerization at pH less than 2 in order to minimize formation of water-soluble polymer which prevents flocculation of pigment in the composition. It is disclosed that the aqueous composition is substantially free of water-soluble polymer having second phosphorous acid groups which refers to levels of water-soluble polymer having second phosphorous acid groups defined by ratios of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups in the range of less than or equal to 1.5.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to produce the polymer particles of copending 10/642,791 using aqueous emulsion polymerization at pH less than 2 in order to minimize formation of water-soluble polymer and thus prevent flocculation of pigment present in the composition, and thereby arrive at the claimed invention from the copending one.

With respect to difference (c), on the one hand, it would have been within the skill level of, as well as obvious to, one of ordinary skill in the art to include colorant as well as white pigment in the polymer composition of copending 10/642,791 to produce composition with desired color depending on its end use. Further, it would have been obvious to one of ordinary skill in the art to choose amounts of colorant, white pigment, and multistage polymer particles depending not only on the desired color of the composition but as well as the desired properties of the composition such as gloss, viscosity, etc.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use colorant and white pigment in the composition of copending 10/642,791 as well as to use colorant, white pigment, and multistage polymer particles in amounts, including those presently claimed, in order to produce composition with desired properties, i.e. color, gloss, viscosity, etc. depending on its end use, and thereby arrive at the claimed invention.

On the other hand, applicants attention is drawn to MPEP 804 where it is disclosed that “the specification can always be used as a dictionary to learn the meaning of a term in a patent claim.” *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968). Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an



invention claimed in the patent. (underlining added by examiner for emphasis) *In re Vogel*, 422 F.2d 438,164 USPQ 619,622 (CCPA 1970).

Consistent with the above underlined portion of the MPEP citation, attention is drawn to page 1, second-fourth paragraphs, page 3, first full paragraph, paragraph bridging pages 13-14, paragraph bridging pages 27-28, page 29, first full paragraph, and page 41, line 11 of copending 10/642,791 which discloses the use of colorant and white pigment in order to produce composition with desired color and hiding power and the use of multistage polymer particles in order to produce composition with good film properties, hiding power, and gloss.

In light of the above, it therefore would have been obvious to one of ordinary skill in the art to use colorant and white pigment in the composition of copending 10/642,791 as well as to use colorant, white pigment, and multistage polymer particles in amounts, including those presently claimed, in order to produce composition with desired color and good hiding power, gloss, and film properties, and thereby arrive at the claimed invention from the copending one.

With respect to difference (d), it is noted that there is no disclosure in copending 10/642,791 that the polymer composition is an ink jet ink as presently claimed. However, applicants attention is drawn to MPEP 2111.02 which states that “if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention’s limitations, then the preamble is not considered a limitation and is of no significance to claim construction”. Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference

between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. ink jet ink, recited in the present claim does not result in a structural difference between the presently claimed invention and the prior art composition. Given that, as discussed above, copending 10/642,791 disclose composition as presently claimed, i.e. comprising multistage polymer particles and colorant, it is clear that the composition of copending 10/642,791 would be capable of performing the intended use, i.e. ink jet ink, presently claimed as required in the above cited portion of the MPEP, and thus, one of ordinary skill in the art would have arrived at the claimed invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 1-4, 6, and 8-10 are directed to an invention not patentably distinct from claim 1 of commonly assigned 10/642,791. Specifically, although the conflicting claims are not identical they are not patentably distinct for the reasons set forth in paragraph 5 above.

7. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). Commonly assigned 10/642,791, discussed above, would form the basis for a rejection of the

noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

8. Claims 1-4, 6, and 8-10 are provisionally rejected under 35 U.S.C. 103(a) as being obvious over copending Application No. 10/642,791 which has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e) if published or patented. This provisional rejection under 35 U.S.C. 103(a) is based upon a presumption of future publication or patenting of the conflicting application. For an explanation of the rejection see paragraph 5 above.

This provisional rejection might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by a showing of a date of invention for the instant application prior to the effective U.S. filing date of the copending

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application under 37 CFR 1.131. This rejection might also be overcome by showing that the copending application is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

**Claim Rejections - 35 USC § 102**

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-4, 6, and 8-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Brown et al. (U.S. 2004/0054063).

Brown et al. disclose polymer composition comprising polymer particles comprised of polymerized units of phosphorous acid monomer and having first phosphorous acid groups wherein the polymer particles are prepared by aqueous emulsion polymerization of the phosphorous acid monomer at pH less than 2 and the polymer composition comprises level of water-soluble polymer having second phosphorus acid groups defined by ratio of equivalents of second phosphorous acid groups to equivalents of first phosphorous acid groups in range of less than or equal to 1.5. It is disclosed that the polymer particles are multistage polymer particles comprising first polymer obtained from multiethylenically unsaturated monomer and phosphorous acid monomer wherein the first polymer has a glass transition temperature (T<sub>g</sub>) of

from  $-60^{\circ}\text{C}$  to  $35^{\circ}\text{C}$  and the second polymer has  $T_g$  of from  $-60^{\circ}\text{C}$  to  $35^{\circ}\text{C}$  wherein the weight percent of first phosphorus acid groups in the second polymer is 10% or less of the weight percent of the first phosphorus acid groups in the first polymer. It is also disclosed that the average weight ratio of the first polymer to the second polymer is from 1:2 to 1:20. It is also disclosed that the composition comprises colorant and white pigment (paragraphs 10, 27-29, 44, 46-48, 52, 61-64, 73, 77, 79, 81, 89, and 117 (lines 3-4).

Attention is drawn to paragraphs 169-175 of Brown et al. which disclose polymer composition comprising colorant, titanium dioxide, and multistage polymer particle as presently claimed. Further, using amounts disclosed in paragraphs 170, 171, and 175, it is disclosed that the polymer composition, i.e. paint, is obtained by adding 50.23 g of aqueous dispersion comprising titanium dioxide and multistage polymer particles with 39.09 g master paint comprising black pigment. The aqueous dispersion comprises approximately 32 wt.%  $((0.765*40.73)/(40.73+56.65))$  titanium dioxide and approximately 19 wt.%  $((0.33*56.65)/(40.73+56.65))$  multistage polymer particles and thus, it is calculated that the polymer composition or paint comprises approximately 18 wt.%  $((0.32*50.23)/(50.23+39.09))$  titanium dioxide and 11 wt.%  $((0.19*50.23)/(50.23+39.09))$  multistage polymer particles. Similarly, given that the master paint comprises approximately 2.4 wt.%  $(41.96/1762.46)$  black pigment, it is calculated that the polymer composition or paint comprises approximately 1 wt.% black pigment  $((0.024*39.09)/(50.23+39.09))$ . It is noted that the amounts of titanium dioxide, colorant, and multistage polymer particles disclosed by Brown et al. are in wt.% while the present claims require the amounts in vol.%. However, given the broad range of titanium dioxide, i.e. white pigment, colorant, and polymer particles presently claimed, and absent

evidence to the contrary, it is clear that the amounts of titanium dioxide, colorant, and multistage polymer particles disclosed by Brown et al. would fall within the presently claimed ranges.

Additionally, with respect to present claim 10, it is noted that there is no disclosure in Brown et al. that the polymer composition is an ink jet ink as presently claimed. However, applicants attention is drawn to MPEP 2111.02 which states that “if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention’s limitations, then the preamble is not considered a limitation and is of no significance to claim construction”. Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner’s position that the preamble does not state any distinct definition of any of the claimed invention’s limitations and further that the purpose or intended use, i.e. ink jet ink, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art composition and further that the prior art structure which is a composition identical to that set forth in the present claims is capable of performing the recited purpose or intended use.

In light of the above, it is clear that Brown et al. anticipate the present claims.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
6/1/06